

Exponential Regression

Learning Objectives

- Perform an exponential regression with a calculator
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Perform an exponential regression with a calculator

1. An internet start-up has been tracking the size of their customer base since 2000. The table below shows the number of customers using their online storefront (in hundreds) each year through 2010.

Years since 2000	0	1	2	3	4	5	6	7	8	9	10
<i>Customer Base</i>	148	173	244	295	372	427	538	650	794	976	1224

Find an exponential regression equation that best fits the data.

2. Use the equation you obtained above to predict the number of customers they are likely to have in 2011. Round your answer to the nearest individual customer.

Exponential Regression can't use any values of y that are 0 or negative. You may need to perform a transformation on the data or eliminate a zero point.

ANSWER KEY

1. $y = 151.95e^{0.2088x}$, or $y = 151.95(1.2322)^x$
2. 151,073 customers